

[DECEMBER 14.

1990

In further illustration of this subject, we may append a letter from M. Howard, civil engineer, also published in the *Monitor*, as follows:—"In the process of which you speak, and which I have practically applied on account of the Mining Company of Virginia, the front of the cylinder is horizontally moved, it is true, but with the exception of the action of a wrought iron tube, about twenty centimeters in diameter, and one meter in length, opening under the grating, and which jet of steam pervades, following its axis, and drawing with it by suction a strong current of air. This jet of steam, therefore, operates (at least, in my opinion) in a purely mechanical manner. To speak more plainly, it serves the office of a simple ventilator, which object could not be obtained by any other method to work so economically or conveniently, and the action of which is indispensable for avoiding the want of combustibility in the present coal of Virginia."

DESCRIPTION OF THE MINERAL DISTRICT OF SOUTH WALES
—ADVANTAGES OF THE PROPOSED RAILWAY.

[illegible][illegible]

times of war, the South Wales Railway will afford the means of either selling a growing line of business, or of concentrating a line at all points with greater capacity than on railway's facilities of general character of service, and under a smaller military. Some of those facilities for all cases, by installing a pair of wireless or an aerial wire in the ground, it has a point of attack in the shortest possible time and without the least

Belgian. The line of communication being extended to Waterford or Wexford, and thence to the banks of the Shannon, a railway power would be presented, which would not only prevent our ever having of riots in Wales, but effectually preclude the attempts of any enemy to make a descent upon our coasts. The advantages supplied by such a communication with the southern and western parts of Ireland would prove of the utmost importance in a mercantile as well as a national view, as it would effect an immense saving in time, either for the transport of goods or troops destined for America, the Cape, the East and West Indies, Gibraltar, or any of our colonies or foreign possessions.

Having taken this general, as well as local, view of the line proposed by the South Wales Railway Company, I can arrive at no other conclusion, than that it has been selected with the greatest wisdom, as being the best adapted to develop our native riches, to increase our manufactures, to extend the markets for our agricultural produce, to promote the interchange of goods and passengers with each other, and with the manufacturing districts of Wales, as well as those of England and Ireland—and that I am quite justified in congratulating those who may have become shareholders in this highly-promising undertaking (more especially the inhabitants of the Principality) upon the prospects it presents. J. M. BUCKLAND.

December 1.

(A.)

Counties	Acres	Loaded	Rate per	Population	Inc. from
		rental	acre.	1841.	1861.
Pembrokeshire	390,400	£731,167	11s. 4d.	108,044	5p. 4d.
Cardiganshire	439,000	143,530	6s. 8d.	68,706	6s.
Merionethshire	483,300	160,168	9s. 3d.	106,326	6s.
Brecon	482,560	170,397	7s. 1d.	65,003	16s.
Glamorgan	505,500	226,652	8s. 11d.	171,188	33s.
Monmouth	317,440	251,919	15s. 9d.	134,355	38s.
	2,752,040	£1,307,759	Av. 9s. 5d.	624,389	Av. 31s.
Somerset	1,002,000	1,361,547	13s. 10d.	433,903	7s.
Wiltshire	874,000	989,878	10s. 6d.	356,733	7s.
Berkshire	461,800	477,520	10s. 10d.	161,147	10s.
Bucks	472,300	545,157	11s. 1d.	155,943	6s.
	3,891,200	£3,284,132	Av. 10s. 9d.	1,011,945	Av. 7s.

(B.)

A TABULAR STATEMENT, showing an approximation to the Weights and Values of Metals annually manufactured, and Mineral Ores imported in South Wales, together with the relative distances by means of the South Wales Railway, from other Ports than those of the customary and general Outlets or Inlets of each District, and giving thereby the facility of such communication daily, at various charges under 4s. 6d. per ton, on the assumption that the Railway Company's toll will be 14d. per ton per mile, and that 2s. 6d. per ton may be deemed an average Summer and Winter Charge for sea-borne conveyance or inland, to and from the same Ports respectively, or either of them—

Districts	Metals	Mineral Ores	Weight	Value	Total weight	Total value	Eastern Ports	Mid.	Western ports	Mid.	Shannon	Low.	Liver.	Mer.	Mid.
			Tons.	£	Tons.	£									
Cardiganshire	Iron plates		670	30000	670	30000	Llanelli	16	Midford	33	Mid.	118	200	274	137
							Swansea	27							
							North	33							
Midvale	Iron plates		670	30000	670	30000	Llanelli	9	Midford	41	100	212	280	169	129
							Swansea	10							
							North	20							
							Port Talbot	30							
Llanelli	British copper		17334	40000			Swansea	11	Midvale	8	100	204	280	161	121
	Foreign		5556				North	17							
	Copper		5192	103270	56311	103270	Port Talbot	22							
							Portsmouth	33							
Swansea	Iron plates		1356	40000			North	6	Llanelli	11	80	100	247	150	110
	British copper		60700				Port Talbot	11							
	Foreign		33000				Portsmouth	32							
	Copper		11600	205400											
	Iron		90000	113300											
	Spelter		900	5000	150734	115330									
North	Iron plates		634	20000			Port Talbot	5	Swansea	6	80	100	241	144	104
	British copper		13553				Portsmouth	10	Llanelli	17					
	Foreign		7079				Cardiff	26							
	Copper		2331	313940											
	Iron		11000	60040											
	Spelter		900	5000	27210	303380									
Cwm Afon	Iron plates		6000	100000			Portsmouth	11	North	5	70	100	236	130	90
	British copper		30000				Cardiff	5	Swansea	11					
	Foreign		15470				Llanelli	22							
	Copper		4370	50430	40000	50430									
Llwyn	Iron		20000	100000			Cardiff	20	Port Talbot	11	67	171	280	130	90
	Spelter		900	5000	20000	131300	Newport	21	North	10					
							Swansea	22							
							Llanelli	23							
Taf	Iron plates		4300	100000			Cardiff	20	Port Talbot	11	67	171	280	130	90
	Iron		130000	240000	140000	240000	Newport	21	North	10					
							Swansea	22							
							Llanelli	23							
Elwyn	Iron		9400	100440	9400	100440	Cardiff	20	Port Talbot	11	67	171	280	130	90
							Newport	21	North	10					
							Swansea	22							
							Llanelli	23							
Ug	Iron plates		670	30000			Cardiff	20	Port Talbot	11	67	171	280	130	90
	Iron		140000	240000	140000	240000	Newport	21	North	10					
	Spelter		900	5000	140000	270000	Swansea	22							
Wyn	Iron plates		10000	100000	10000	100000	Cardiff	20	Port Talbot	11	67	171	280	130	90
							Newport	21	North	10					
							Swansea	22							
							Llanelli	23							
Forest of Dean	Iron plates		10700	100000			Cardiff	20	Port Talbot	11	67	171	280	130	90
	Iron		37000	240000	37000	240000	Newport	21	North	10					
							Swansea	22							
							Llanelli	23							

The prospects of communication to the promoters of this undertaking are generally satisfactory. An estimate has been carefully made of the expected traffic, and the result is as follows—

From	Percentage	Existing	Expected
Stages	Trains	Trains	Trains
By steam-trains—			
From Newport to Bristol	One-third of existing		
Cardiff	4000		
Swansea	4000		
Trinity	4000		
Cardiganshire	4000		
Haywards	4000		
Waterford	4000		
Cork	4000		
Dublin	4000		
Postage, printing, newspapers, and other expenses		10,000	
Irish traffic now going via Longford—total of present and expected		55,000	
Estimated the railway business at only double this sum, the passenger traffic will amount to—			
From goods—		400,000	
Copper, zinc, tin, plates, manufactured iron, &c.		400,000	
Coal, wood, lime, stone, and heavy goods		70,000	
Cattle and other live stock		10,000	
General merchandise		50,000	
Total goods traffic		530,000	
From passengers, &c.		17,000	
Continuation of main line		10,000	
Branches—chief		7,000	
Grand aggregate		547,000	
Reducing at per cent. the expense of working the line, equal to		100,000	

